

Final Abstract Number: 45.043

Session: Bacterial Infections

Date: Friday, June 15, 2012

Time: 12:45–14:15

Room: Poster & Exhibition Area

Brain abscess, epidemiology, clinical manifestations and management

F. Abbasi¹, M. Besharat², S. Korooni^{3,*}

¹ Bushehr University of Medical sciences, Bushehr, Iran, Islamic Republic of

² Shahid Beheshti Medical University, Tehran, Iran, Islamic Republic of

³ Shiraz University of medical Sciences, Shiraz, Iran, Islamic Republic of

Background: Infection involving the cerebrum is a true neuro-surgical emergency that requires rapid diagnosis and appropriate surgical and medical intervention to achieve good clinical outcome.

Methods: In this study we evaluated 41 patients with brain abscess in our hospital in during 2005–2010. Demographic information, predisposing factors, clinical manifestations, lab. data and managements were evaluated.

Results: In this study 53.6% of patients were 15–29 years old, 26% were 30–49 and 17% were 50–70 years old. Clinical manifestation was as follow in our study:

Headache 92.6, nausea and vomiting 73.1, meningeal signs 17, drowsiness 12, decreased level of consciousness 9.7, fever 9.7, urinary and fecal incontinence 7.3, visual disturbance 7.3, chills 4.8. Predisposing condition leading to brain abscess in our study were sinusitis in 9.17, otitis in 12, CSF rhinorrhea in 2.4, mastoiditis in 7.2, neurosurgery in 17 and endocarditis in 2.4. 20% of our patients had no risk factor. Antibiotics used in our study were ceftriaxone, metronidazole and vancomycin. Mortality rate was 12% in this study. 9.7% of our patient that were admitted with diagnosis of brain abscess finally diagnosed as they had acute demyelinating encephalomyelitis (ADEM).

Conclusion: With prompt diagnosis and treatment most cases of brain abscess survived. Few cases initially diagnosed as brain abscess may have other diagnosis like acute demyelinating encephalomyelitis (ADEM).

<http://dx.doi.org/10.1016/j.ijid.2012.05.834>

Type: Poster Presentation

Final Abstract Number: 45.044

Session: Bacterial Infections

Date: Friday, June 15, 2012

Time: 12:45–14:15

Room: Poster & Exhibition Area

A long-term antimicrobial prophylaxis and/or immunotherapy in female patients with recurrent urinary tract infections

S. Krcmery^{1,*}, J. Hromec²

¹ Comenius University Faculty of Medicine, Bratislava, Slovakia

² University of Trnava, Trnava, Slovakia

Background: It is accepted that long-term low-dose antimicrobial prophylaxis decreases recurrence of urinary tract infections (UTI). In recent years, the oral administration of immunother-

long-term preventive effect of chemoprophylaxis with low-dose fluoroquinolones and/or immunotherapy in women with recurrent UTI. Both Uro-Vaxom (OM – 89) and Luivac are extracts of bacterial components with complex immunostimulating activity.

Methods: Adult female patients with at least 3 documented episodes of UTI in previous year were enrolled in this 12-months, multicenter study. Patients received continuous chemoprophylaxis with low-dose ciprofloxacin and/or immunotherapy with either Uro-Vaxom or Luivac. Primary efficacy criteria were UTI episodes over the 12 months treatment period.

Results: A total of 178 patients were treated, 89 in the Uro-Vaxom and 89 in the Luivac group, respectively. Mean rate of post baseline UTIs decreased significantly in both treatment groups: in Uro-Vaxom group from 3.54 to 0.48 episode/patient/year and in Luivac group from 3.63 to 0.41 episode/patient/year, $p < 0.001$. There were 67.1% patients treated with combination of immunotherapy and quinolone prophylaxis vs. 52.7% patients treated with immunotherapy only, who were UTI-free in 12-months study period ($p = 0.04$). In the subgroup receiving continuous antimicrobial prophylaxis with ciprofloxacin (125 mg orally every other day), selection of quinolone-resistant strains was observed in 9 patients (ESBL-producing strains of *E. coli* and *Klebsiella pneumoniae*).

Conclusion: These results confirm that immunotherapy is more safe and almost as effective as low-dose quinolone prophylaxis in prevention of recurrent UTI. Selection of quinolone-resistant strains is a potential threat for patients on long-term treatment with fluoroquinolones.

<http://dx.doi.org/10.1016/j.ijid.2012.05.835>

Type: Poster Presentation

Final Abstract Number: 45.045

Session: Bacterial Infections

Date: Friday, June 15, 2012

Time: 12:45–14:15

Room: Poster & Exhibition Area

Multilocus sequencing analysis of viridans group streptococci isolated from patients with infective endocarditis

N. Kumar*, T. Menon

Dr. ALM PG IBMS University of madras, Chennai, Tamilnadu, India

Background: Infective endocarditis (IE) is a serious infection associated with considerable morbidity and mortality. About 44% of the IE cases are commonly due to a heterogeneous group of organisms, which are the part of commensal flora of the upper respiratory tract in humans called viridans group streptococci (VGS). Each species of VGS possesses variable pathogenicity and virulence potential, hence, accurate identification of VGS to the species level is important. The taxonomy of these organisms has been always perplexing, and accurate identification of VGS remains a challenge due to the high degree of similarity between members of the groups. Very closely related species of VGS can be identified from other species using the concatenated sequences of multiple core (house-keeping) genes known as Multilocus Sequencing Analysis (MLSA). More recently, a MLSA technique has been developed for identification of VGS based on the nucleotide sequence analysis of seven house-keeping genes. Hence, this study was aimed to assess the reliability and discriminate efficiency of MLSA for the identification of VGS.